# Celebrating the Constitution

1787-1987

National Archives

*This computer is helping scientists take a close-up look at the Constitution. The computer helps scientists see if the paper or ink need repairs.*

## Watching Over the Constitution

Have you ever cut a story out of the newspaper and tried to save it? What happened? After a few weeks, the paper got yellow and wrinkled, right?

The changes in your newspaper clipping are similar to what has happened to the Constitution over the past 200 years. The paper that the Constitution is written on has dried out. This has caused it to crack and the ink to flake off.

In the 1950s, scientists sealed the document in a glass container filled with a gas called helium. The helium helps to keep the Constitution from drying out.

But, very slowly, the Constitution continues to show signs of getting old. So today scientists use a computer and a special camera to help spot the problems. The camera takes pictures of the Constitution, one square inch at a time. Each picture is fed into the computer, which looks closely for fading, flaking ink, or other signs of decay. The computer can also help scientists decide what is causing the problems, whether too much light is hitting the document, or the helium is escaping, or some other cause. By examining the data, scientists can decide how to fix or stop the damage.

With the help of the computer, scientists hope this piece of paper will still be around 200 years from now — in 2187.

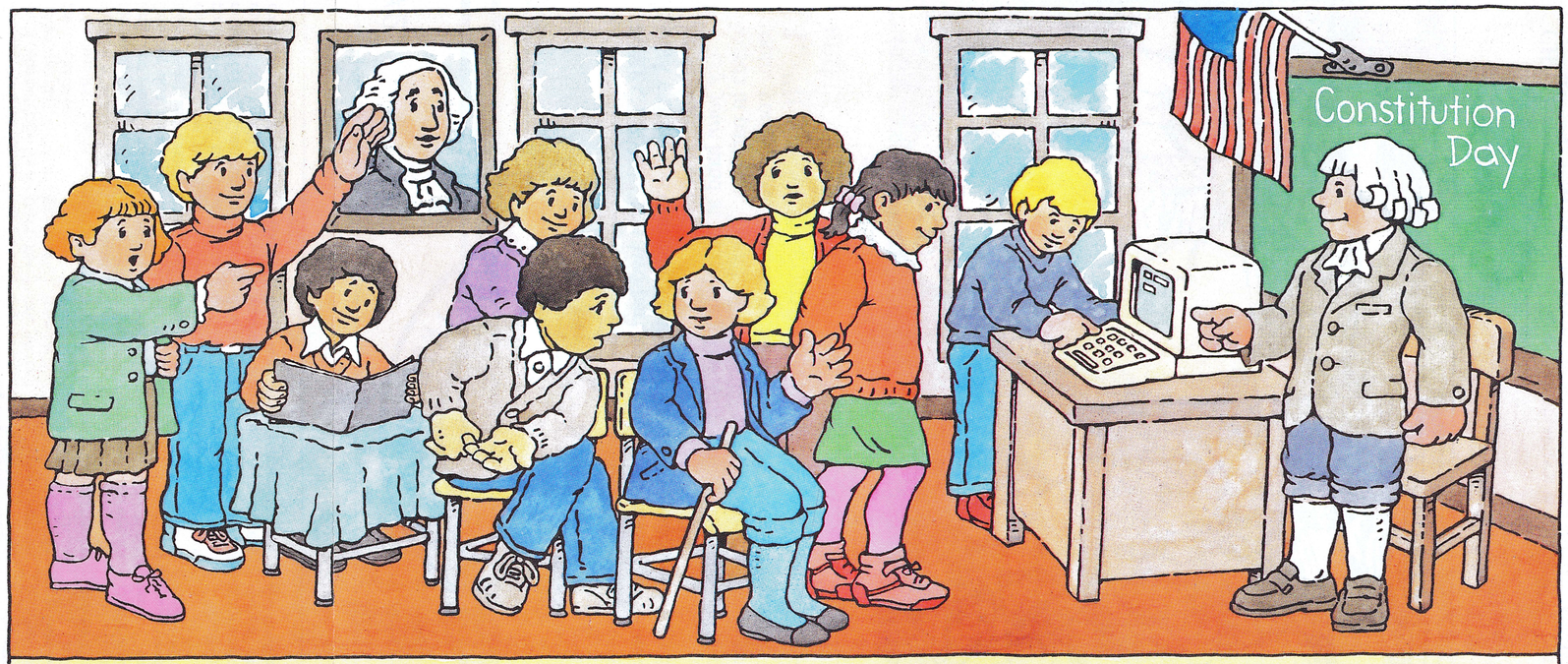
## Who Am I?

Some very famous Americans signed the Constitution. How many of them do you know about? Here is some information about one of them. See if you can guess who he is.

- I was born January 17, 1706.
- I was the oldest delegate at the Constitutional Convention. (I was 81!)
- I was one of only six men who signed both the Declaration of Independence and the Constitution.
- Some historians say that I wept when I signed the Constitution.
- I rode to the Convention hall each day in a fancy chair carried by four prisoners from a nearby jail (I couldn't walk very well because I suffered from a disease called *gout*).

Did you guess who this Founding Father is? (Hint: His initials are B.F.!)

Now create your own "Who Am I?" challenge. Choose one of the men who signed the Constitution. (You can find their names by looking under "Constitution" in the encyclopedia.) Find five facts about your signer. Then boot up your word processing program and list these facts in a word processing file. Save your file on a disk under your name. Now let your classmates take turns reading your file. Can they guess who your Founding Father is? Extra Challenge: Act out the part of your Founding Father. Use some of his famous quotes. Can your friends guess who you are?




## Write Your Own

The Constitution is a set of rules for everyone in the country to live by. It took four months to write these rules back in 1787, because each of the Founding Fathers wanted something different at first. But together they were finally able to *compromise* — everyone changed his mind a little and an agreement was reached.

To see how the authors of the Constitution had to work together, try writing a constitution for your computer center. Get together with a small group and boot up your word processing program. Now, try to think up 10 good rules to help everyone get the most out of the computer center. The tricky part is remembering that *everyone* needs to agree on the rules, even the teacher. Your group will also need to think about how each rule will affect the whole class. What if your group decides that, as one rule, anyone can play a computer game whenever he or she wants to? This means that someone could be playing a noisy game while the rest of the class is trying to read! Would that be fair?

When you finish your rules, save them on a disk. Print out a copy and have everyone in the classroom vote on them. Did the whole class approve of your rules? If some people voted "no," how do they think the rules should be changed?

Discuss any changes suggested by the class, then boot up your disk and use the editing commands on your word processing program to revise the rules as needed. When your Computer Center Constitution is complete, hang it up where it can be read by all.

## A Quick Quiz You're Sure to Pass

1. Which one of the 13 original states did not send delegates to the Constitutional Convention?
**a. Hawaii**
**b. Rhode Island**
**c. France**

2. The Convention was held in:
**a. Philadelphia**
**b. Fairbanks**
**c. Los Angeles**

3. The leader of the Convention was:
**a. Ronald Reagan**
**b. Paul Revere**
**c. George Washington**

4. The first ten amendments to the Constitution are known as:
**a. The Bill of Rights**
**b. The Top Ten**
**c. The Bill of Goods**

## Conventional Numbers

**55** delegates were present when the Constitutional Convention began.

**14** delegates left before the Convention ended.

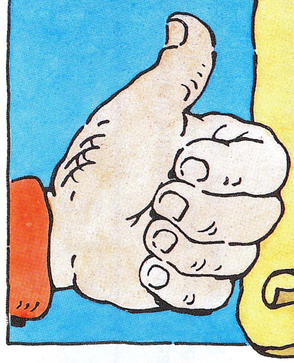
**3** delegates who were at the Convention until the end decided not to sign the Constitution.

**6** delegates signed both the Declaration of Independence and the Constitution.

**4,543** words are written in the Constitution.

**116** days after the Convention began, the Constitution was finally signed.

## Thumbs Up for the Constitution

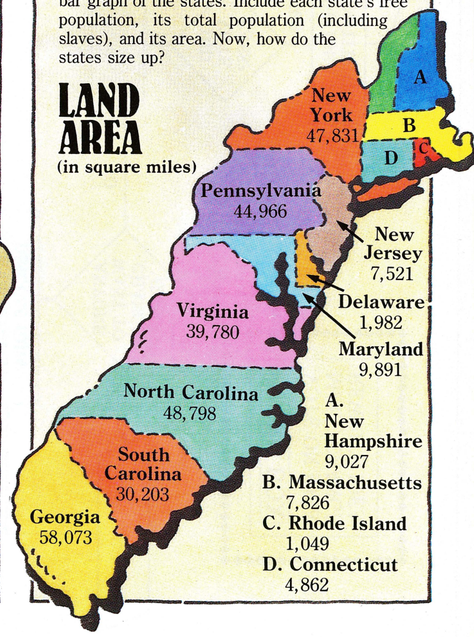


**On December 7, 1787, Delaware became the first of the 13 states to *ratify* (approve) the Constitution. Almost three years later, on May 29, 1790, Rhode Island became the last of the 13 states to ratify it. Since then, each state has formally accepted the Constitution when it has entered the Union. Do you know when your state either ratified the Constitution or entered the Union? Find out. Then use your computer and a graphics program to make a Ratification Certificate for your state in honor of this special day.**

## Sizing the States

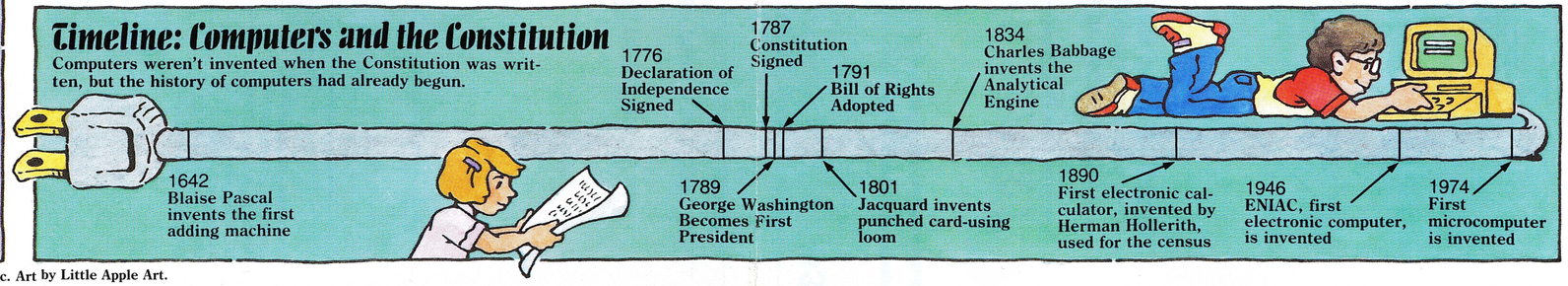
Look at the map below. Which one of the 13 original states is the largest? If you said Georgia, you're only partly right. In 1787, Georgia was the largest state according to its land size (its *area),* but Virginia was the largest state according to its population.

Why not use your computer to size up the 13 original states? With a graphing program, make a bar graph of the states. Include each state's free population, its total population (including slaves), and its area. Now, how do the states size up?




## Timeline: Computers and the Constitution

**Computers weren't invented when the Constitution was written, but the history of computers had already begun.**


1642 Blaise Pascal invents the first adding machine
1776 Declaration of Independence Signed
1787 Constitution Signed
1789 George Washington Becomes First President
1791 Bill of Rights Adopted
1801 Jacquard invents punched card-using loom
1834 Charles Babbage invents the Analytical Engine
1890 First electronic calculator, invented by Herman Hollerith, used for the census
1946 ENIAC, first electronic computer, is invented
1974 First microcomputer is invented

*Teaching and Computers* Poster Series. Copyright © 1987 by Scholastic Inc. Art by Little Apple Art.

COPY

NOTES

HOW TO USE THIS MONTH'S POSTER AND WORKSHEETS

# TEACHER'S NOTES

What do computers have to do with the Constitution's Bicentennial? All kinds of things, with this special interactive poster from *Teaching and Computers*! Here are some ideas for putting the poster to work with *your* computer-using students.

You might begin by reading aloud the item called ***Watching Over the Constitution***, which tells how scientists are trying to preserve the 200-year-old document. With older students, discuss how technology has changed the ways we keep a record of the past. What has been the impact of photocopiers, microfilm, tape recorders, and above all, computers? This may be a good point to assign your middle elementary students Worksheet #2, ***Writer's Helper***, which challenges students to think about how computers might have helped the Founding Fathers.

Next, turn your students' attention to ***Timeline: Computers and the Constitution***. Two hundred years is a long time ago. Or is it? Have students find the year the Constitution was signed on the time line. They'll see that Pascal had already invented his adding machine. And only four years after the signing, Jacquard invented his famous loom. How much do your students know about these early computers? Have them research the inventions and give a report on each one.

Or, use the timeline as the starting point for a "March of Time" data base the whole class can add to all year long. For younger students, you can limit the data record to two fields: DATE (year) and EVENT. Enter the events shown on the front of the poster. Then, as the class learns more about the Constitution, American history, world history — even computer history! — have students randomly enter new dates and events in the data base. Periodically, they can SORT by date and print out. How far have they stretched the timeline, and where does the Constitution fit in now? With more advanced students, you may want to expand the data record to include such fields as COUNTRY and TYPE OF EVENT (for example, war, invention, election). As kids add to the data base, have them practice searching the data to answer such questions as: How many computer products and other inventions were developed in times of war? How were events in the 1850s similar and different in countries around the world?

Younger students will now be ready for Worksheet #1, ***Once Upon a Time***. The worksheet presents three activities that test students' understanding of where computers and the Constitution fit in the overall context of history.

***Thumbs Up for the Constitution*** tells how the original 13 states ratified the Constitution and how each later state accepted the Constitution when it joined the Union. The article suggests that kids use a graphics or award-making program, like *Certificate Maker* (Springboard), *Award Maker Plus* (Baudville), or *The Print Shop* (Broderbund/Scholastic), to create a Ratification Certificate for their state. As an extension, have them add the state flower, motto, or song to the certificate. This is a good opportunity for discussing your state's history!

When your students are ready for a little math practice, have them create the graph suggested in ***Sizing the States.*** They might want to make a similar graph using population figures for the 13 states in 1987, and then compare their two graphs. If students are familiar with percentages, have them compute the percent of change in the population of each of the original 13 states. Which state has grown the most?

After students have tried writing a Constitution as suggested in ***Write Your Own***, have them discuss the experience (including how the computer made their writing task easier). Encourage older kids to focus particularly on the steps they went through to create a constitution everyone liked. They'll be ready then to ***Finish the Flowchart*** on Worksheet #3.

As a special part of your celebration of the Constitution, bring together all your students' knowledge of the Constitution and the people who wrote it into a class play. After students have completed their ***Who Am I?*** files, let them assume the role of their Founding Father. The play could be about the last day of the Constitutional Convention, when the delegates stepped forward to sign it, or it could be about the delegates as they headed home to ask their respective states to ratify the new Constitution. This role-playing will give kids insight into what the Founding Fathers had to think about when writing the new Constitution.

**WORKSHEET ANSWERS**

**Worksheet #1**: The correct order for "Which Came First?" (top to bottom), is 3,1,2. For "Flag Waving," the flag on the left was flown in 1787. The answers to the "Constitution Quiz" are True, False, True.

**Worksheet #2**: The first panel should read, "If I had a computer, printer, and word processing program," and the second panel should read, "I wouldn't get writer's cramp!"

**Worksheet #3**: The first empty parallelogram should read "make change"; the second "vote on idea"; and the third "rewrite idea."

Permission granted to copy for classroom use. Copyright © 1987 by Scholastic Inc.

COPY

PRIMARY

#1

WORKSHEET TO COPY AND USE WITH THIS MONTH'S POSTER

NAME: _____

# ONCE UPON A TIME

## Which Came First?

**DIRECTIONS:** Read the three sentences below. Number them 1, 2, 3 in the order they happened.

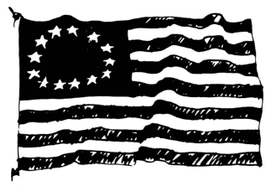
Microcomputers were invented. ____

The Constitution was signed. ____

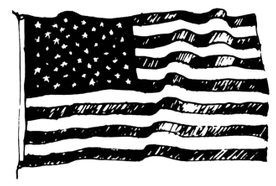
George Washington became the first President. ____

## Flag Waving

**DIRECTIONS:** Look at the two flags below. They are both U.S. flags. Which flag was flown in 1787? Which flag is flown in 1987? Write the correct date on the line under each flag.



_____



_____

## Constitution Quiz

**DIRECTIONS:** Write True or False in the blank next to each sentence.

1. The Constitution is 200 years old. ____
2. The Founding Fathers used computers to write the Constitution. ____
3. The Constitution is a set of rules for everyone in the country to follow. ____

#2

COPY

INTERMEDIATE

WORKSHEET TO COPY AND USE WITH THIS MONTH'S POSTER

NAME: _____

# WRITER'S HELPER

**DIRECTIONS:** The two-part cartoon below shows Gouverneur Morris hard at work writing the Constitution with pen and ink — all 4,543 words of it. But what is he saying?

Try *your* hand at completing this Constitution cartoon. First, fill in the missing words in part one. Then look at the letters that are circled. When you unscramble them, you'll get the punchline for part two! (One letter is done for you.)

1. "If I had a computer, ___ ___ ◯ ___ ___ ◯ ◯ ◯, and ◯ ___ ◯ ___ ___ ◯ ___ ◯ ___ ◯ ___ ___ ___